IN THE SPECIFICATION:

Please replace the title of the invention with the following:

~~VIDEO RESTORING~~ METHOD AND APPARATUS ~~AND METHOD THEREOF~~ FOR IMPROVING VIDEO QUALITY

Please insert the following paragraph on page 1 after the title:

CROSS REFERENCE TO RELATED ART

This application claims the benefit of Korean Patent Application No. 2000-73724, filed on December 6, 2000, the contents of which is hereby incorporated by reference in its entirety.

Please replace paragraph starting at line 1 of page 2 with the following paragraph:

U.S. Patent No. 4,876,596 relates to a method of interpolating a video using line information of the current field itself repeatedly. Yet, the interpolating method of U.S. Patent No. 4,876,596 is realized by a simple hardware but fails to ~~provide~~ prevent a degraded quality of the video.

Please replace paragraph starting at line 14 of page 2 with the following paragraph:

U.S. Patent No. 5,596,371 relates to a motion compensation interpolation method of carrying out interpolation by finding motion vectors. The interpolation method disclosed in U.S. Patent No. 5,596,371 enables to improve an image quality after interpolation, but ~~should use a~~ utilizes complicated hardware ~~to realize~~.

Please replace paragraph starting at line 16 of page 6 with the following paragraph:

Referring to Fig. 1, a field data providing unit 11 provides data of previous fields n and n-1, a current field n+1, and a future field n+2 by constructing three field memories 11A to 11C. A scene transition detecting unit 12 detects a motion between the fields adjacent to the current field n+1 by receiving the field data from the field data providing unit 11. On the basis of the detected motion, the scene transition detecting unit 12 outputs a scene transition detecting signal by identifying whether a scene of an inputted image sequence is changed on the basis of the detected motion. A 3:2 pull-down mode detecting unit 13 detects whether a 3:2 pull-down mode exists in the inputted image sequence by receiving the field data from the field data providing unit 11. The 3:2 pull-down mode detecting unit 13 also outputs a corresponding first control signal CS by referring to a result of the detection and the scene transition detecting signal. A field interleaver 14 is driven when the first control signal CS is inputted from the 3:2

pull-down mode detecting unit 13 and generates an interpolated frame by interleaving the field n+1 to be interpolated with the adjacent fields n-1, n, and n+2 ~~each other~~. A de-interlacer 15 detects a motion of the current field n+1 in accordance with the first control signal CS. Based on the detected motion, the de-interlacer 15 generates an interpolated frame by de-interlacing the field n+1 to be interpolated with the adjacent fields n-1, n, and n+2. A multiplexer 16 selectively outputs the frame generated from the field interleaver 14 in accordance with the first control signal CS or the frame generated from the de-interlacer 15. The construction of the 3:2 pull-down mode detecting unit 13 is explained in detail as follows.

Please replace paragraph starting at line 5 of page 9 with the following paragraph:

Thereafter, the scene transition detecting unit 12 counts the part, where the motion between the current and previous fields n+1 and n is detected, over the entire image. Moreover, the scene transition detecting unit 12 counts the part, where the motion between the current and future fields n+1 and n+2 is detected, over the entire image. Namely, the scene transition detecting unit 12 identifies whether the scene is changed by comparing the motion count values between the respective fields ~~each other~~. For instance, the scene transition detecting unit 12 identifies whether the scene is changed on the basis of a comparison result between motion quantities of the previous and current fields n and n+1 and the current and future fields n+1 and n+2, a comparison result between motion quantities of the previous and current fields n and n+1 and the previously stored threshold value, or a comparison result between motion quantities of the current and future fields n+1 and n+2 and the threshold value.

Please replace paragraph starting at line 10 of page 10 with the following paragraph:

Thereafter, the 3:2 pull-down mode detecting unit 13 counts the part, where the motion between the previous fields n and n-1 and the future field n+2 is detected, over the entire image. Namely, the 3:2 pull-down mode detecting unit 13 detects whether the 3:2 pull-down mode exists on the basis of the comparison result by comparing the motion count value between the respective fields to the previously set-up threshold value.

Please replace paragraph starting at line 16 of page 10 with the following paragraph:

If a result attained by carrying out the 3:2 pull-down mode detecting procedures consecutively on the respective fields satisfies one of "10000", "01000", "00100", "00010", and "00001", it is detected that the output sequence is repeated every five fields. This is explained in ~~detain~~ detail as follows.

Please replace paragraph starting at line 24 of page 10 with the following paragraph:

The logic signal outputted from the same field identifier 21 is ANDed successively with the values of the field flags 24A to 24E inputted through the multiplexer 25, whereby the ANDed values are ~~recorded~~ stored in the field flags 24A to 24E in order.

Please replace paragraph starting at line 3 of page 11 with the following paragraph:

The sequence identifying unit 26 identifies whether the values ~~recorded~~ stored in the field flags 24A to 24E are equal to the values recorded in the previous image sequence. In this case, the counter 27 counts the number identified as same by the sequence identifying unit 26 and the comparator 28 compares the count value of the counter 27 to the previously set-up threshold value Vth.

Please replace paragraph starting at line 8 of page 11 with the following paragraph:

Hereafter, the field interleaving controller 29 outputs the first control signal ~~CD~~ CS by referring to the comparison result of the comparator 28 and the scene transition detecting signal SCD outputted from the scene transition detecting unit 12 so as to compensate the input video properly. Namely, if it is judged that the output sequence is repeated every five fields as many as the previously set-up count by referring to the comparison result from the comparator 28, the interleaving controller 29 identifies that the input image sequence (field data) consists of the 3:2 pull-down mode and outputs the corresponding first control signal CS. In this case, operation of the de-interlacer 15 becomes off and that of the field interleaver 14 becomes on so that the interpolated frame is generated by interleaving the current, previous, and future fields n+1, n, and n+2 in accordance with the output sequence.

Please replace paragraph starting at line 22 of page 12 with the following paragraph:

Namely, the field interleaver 14 generates the interpolated frame by interleaving the current, previous, and future fields n+1, n, and n+2 with each other in accordance with the first control signal CS outputted from the 3:2 pull-down mode detecting unit 13.

Please replace paragraph starting at line 1 of page 13 with the following paragraph:

The de-interlacer 15, when the 3:2 pull-down mode is not detected, is driven in accordance with the first control signal CS outputted from the 3:2 pull-down mode detecting unit

13. In this case, the de-interlacer 15 generates the interpolated frame by interleaving the current field n+1, previous fields n and n-1, and future field n+2 with each other.